

REMARKS

This communication is a full and timely response to the non-final Office Action dated December 15, 2004 (Paper No./Mail Date 12112004). By this communication, claims 1 and 3 have been canceled without prejudice or disclaimer of the underlying subject matter. Further claim 2 has been amended and claims 4-11 have been added.

Claim 2 has been amended to recite that the motor stop control means for performing stop control of the motor through two-phase excitation after performing a control for reducing the rotating speed of the motor based on a stop command for the motor, that the motor is a stepping motor, that the deceleration transmission mechanism has an output-side gear provided on a driving side of the stepping motor and an input-side gear disposed at the reel such that the input-side gear is in contact with the output-side gear and coaxial with the rotating shaft of the reel, and that the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor. Support for the subject matter added to claim 2 can be found variously throughout the specification and claims, for example, at paragraphs [0048-0050] of corresponding U.S. Patent Application Publication No. 2004-0222760 (the '760 publication) and in original claim 3. No new matter has been added.

Claim 4 depends from claim 2 and additionally recites that the motor stop control means performs the control for reducing the rotating speed of the motor by transmitting pulses in a number corresponding to a predetermined time interval. Support for the subject matter recited in claim 4 can be found variously throughout the specification, for example, at paragraph [0099] of the '760 publication. No new matter has been added.

Claim 5 depends from claim 4 and additionally recites that the motor stop control means performs the stop control through two-phase excitation by transmitting pulses in a number corresponding to a predetermined time interval. Support for the subject matter recited in claim 5 can be found variously throughout the specification, for example, at paragraph [0098] of the '760 publication. No new matter has been added.

Claim 6 depends from claim 2 and additionally recites a mounting plate for fixing the rotating shaft, and that the input-side gear is inserted into the rotating shaft, and the vibration-suppressing member is a spring that is inserted into the rotating shaft and urges the input-side gear against the mounting plate. Support for the subject matter recited in claim 6 can be found

variously throughout the specification, for example, at paragraphs [0056-0058] of the '760 publication. No new matter has been added.

Claim 7 depends from claim 2 and additionally recites that the vibration-suppressing member is an oil dumper having a base portion in which an oil is charged and a rotating portion having a gear which is in contact with the input-side gear, and a rotating force of the rotating portion is moderate by the oil charged in the base portion. Support for the subject matter recited in claim 7 can be found variously throughout the specification, for example, at paragraphs [0143-0147] of the '760 publication. No new matter has been added.

Claim 8 depends from claim 2 and additionally recites that the vibration-suppressing member is a high-friction member that is fastened to the rotating shaft to a fastening member. Support for the subject matter recited in claim 8 can be found variously throughout the specification, for example, at paragraphs [0149-0151] of the '760 publication. No new matter has been added.

Claim 9 depends from claim 8 and additionally recites that the high-friction member is a felt. Support for the subject matter recited in claim 9 can be found variously throughout the specification, for example, at paragraphs [0149] of the '760 publication. No new matter has been added.

Claim 10 depends from claim 8 and additionally recites that the high-friction member is a wave washer. Support for the subject matter recited in claim 10 can be found variously throughout the specification, for example, at paragraphs [0149] of the '760 publication. No new matter has been added.

Claim 11 recites a motor stop control device for a rotating reel type gaming machine that includes a motor having two pairs of excitation phases as a driving source of a reel, the reel having a plurality of symbols drawn thereon, the motor stop control device comprising a deceleration transmission mechanism that transmits the rotation of the motor to rotating shafts so that the reel is rotated at a predetermined speed reduction ratio; and motor stop control means for performing stop control of the motor through two-phase excitation after performing a control for reducing the rotating speed of the motor based on a stop command for the motor; wherein the motor is a stepping motor, and wherein the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor. Support for the subject matter recited in claim 11 can be found variously throughout the

specification and claims, for example, in original claims 2 and 3. No new matter has been added.

Claims 2 and 4-11 are pending where claims 2 and 11 are independent.

Claim Objections

Claims 1-3 were objected to for alleged informalities. As discussed above, Applicant has canceled claims 1 and 3 without prejudice. Therefore, the objection to these claims is moot and should be withdrawn. Claim 2 has been amended to remove each instance of “from the outside” and “operational instruction.” Accordingly, Applicant respectfully requests that the objection to claim 2 be withdrawn.

Double Patenting Rejection

Claims 1 and 2 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1 and 6 of copending Application No. 10/834,182. Applicant respectfully traverses this rejection.

As discussed above, claim 1 has been canceled without prejudice. Furthermore, claim 2 has been amended to incorporate, among other things, the subject matter of claim 3. For at least these reasons, Applicant respectfully requests that the double patenting rejection of claims 1 and 3 is moot and should be withdrawn.

Rejections Under 35 U.S.C. §112

Claims 1-3 were rejected under 35 U.S.C. §112, second paragraph as indefinite. Applicant respectfully traverses this rejection. However, in an effort to expedite prosecution claims 1 and 3 have been canceled without prejudice. Thus, the rejection with respect to these claims is moot and should be withdrawn. Further, claim 2 has been amended to, among other things, incorporate the subject matter of canceled claim 3 and improve idiomatic English and form. Accordingly, Applicant respectfully requests that the rejection of claims 1-3 under 35 U.S.C. §112, second paragraph be withdrawn.

Rejections Under 35 U.S.C. §103

Claims 1 and 3 were rejected under 35 U.S.C. §103(a) as unpatentable over *Watanabe et al.*, JP 2003-117076 in view of *Inoue*, U.S. Patent No. 6,540,227. Applicant respectfully traverses this rejection.

As discussed above, claims 1 and 3 have been canceled without prejudice. Therefore, the rejection of claims 1 and 3 under §103 is moot and should be withdrawn.

Claim 2 was rejected under 35 U.S.C. §103(a) as unpatentable over *Watanabe* in view of *Inoue* and further in view of *Yamamoto*, U.S. Patent No. 4,765,078. Applicant respectfully traverses this rejection.

Claim 2 recites a motor stop control device for a rotating reel type gaming machine that includes a motor having two pairs of excitation phases as a driving source of a reel, the reel having a plurality of symbols drawn thereon, the motor stop control device comprising a deceleration transmission mechanism that transmits the rotation of the motor to rotating shafts so

that the reel is rotated at a predetermined speed reduction ratio; motor stop control means for performing stop control of the motor through two-phase excitation after performing a control for reducing the rotating speed of the motor based on a stop command for the motor; and a vibration-suppressing member that dampens vibration of the reel that occurs when the rotation of the reel is stopped by the stop control of the motor stop control means, wherein the motor is a stepping motor, wherein the deceleration transmission mechanism has an output-side gear provided on a driving side of the stepping motor and an input-side gear disposed at the reel such that the input-side gear is in contact with the output-side gear and coaxial with the rotating shaft of the reel, and wherein the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor.

Watanabe discloses a slot machine having a controller that regulates the operation of a stepper motor. The controller 111 applies a halt control operation on the reel under rotation, when either stop buttons 41L, 41C, and 41R are operated or a predetermined amount of time has elapsed. *See* [0047]. In particular, a stop signal is inputted into the controller 111 through a switching circuit 116. During the halt control operation, two phases of a reel motor 402 that are located on opposite sides of the halt phase are excited collectively. *See* [0054]. The reel motor 402 is driven by a 1-2 phase excitation method. The Office Action acknowledges that *Watanabe* fails to disclose, teach, or suggest at least a deceleration transmission mechanism, and relies on *Inoue* to remedy this deficiency. Applicant respectfully submits, however, that *Watanabe* further fails to disclose, teach, or suggest at least the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor, as recited in claim 2.

Inoue discloses a symbol displaying unit of a game machine having a motor chamber and a gear changes. A drive gear 45 is fixed to the drive shaft 41. A transmission gear 48 is formed such that a larger gear 46 and a smaller gear 47 are unified to be coaxially rotated. The small-sized drive gear 45 is meshed with the larger gear 46, and the large-sized output gear 49 is meshed with the smaller gear 47. Thus, the rotation of the drive shaft 41 is transmitted to the output shaft 18 via two pairs of reduction gear mechanisms. *See* col. 6, lines 1-13. The Examiner acknowledges that *Inoue* fails to disclose, teach, or suggest at least a vibration-suppressing member, and relies on *Yamamoto* to remedy this deficiency. Further, Applicant

respectfully submits that *Inoue* also fails to disclose, teach, or suggest at least that the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor, as recited in claim 2.

Yamamoto discloses a reel assembly for slot machines having a pulsating motor that is attached to a side wall of a reel housing 26 through a rubber vibration damper 24. The rubber vibration damper 24 prevents the reel assembly from joggling in the rotation direction when the pulsing motor 14 stops. *Yamamoto*, however, fails to disclose, teach, or suggest at least that the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor, as recited in claim 2.

In summary, *Watanabe*, *Inoue*, and *Yamamoto* either singly or combined fail to disclose, teach, or suggest at least that the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor, as recited in claim 2. For at least this reason, Applicant respectfully submits that a *prima facie* case for obviousness has not been established.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Moreover, obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hosp. Sys. V. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). For at least the above reasons, Applicant respectfully requests that the rejection of claim 2 be withdrawn, and claim 2 be allowed.

Claims 4-10 depend from claim 2. By virtue of this dependency, Applicant submits that claims 4-10 are allowable for at least the same reasons given above with respect to claim 2. In addition, Applicant submits that claims 4-10 are further distinguished over *Watanabe*, *Inoue*, and *Yamamoto* by the additional elements recited therein, and particularly with respect to each claimed combination. Applicant respectfully requests, therefore, that the rejection of claims 4-10 under 35 U.S.C. §103 be withdrawn, and these claims be allowed.

Newly Added Claim

Claim 11 recites a motor stop control device for a rotating reel type gaming machine that includes a motor having two pairs of excitation phases as a driving source of a reel, the reel having a plurality of symbols drawn thereon, the motor stop control device comprising a deceleration transmission mechanism that transmits the rotation of the motor to rotating shafts so that the reel is rotated at a predetermined speed reduction ratio; and motor stop control means for performing stop control of the motor through two-phase excitation after performing a control for reducing the rotating speed of the motor based on a stop command for the motor; wherein the motor is a stepping motor, and wherein the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor.

As discussed above, the prior art of record fails to disclose, teach, or suggest at least that the speed reduction ratio is determined by a ratio between a number of steps of one rotation of the motor, and the least common multiple calculated from a number of the symbols drawn on the reel and the number of steps of the motor. For at least this reason, Applicant respectfully submits that claim 11 is allowable. Accordingly, Applicant respectfully requests that claim 11 be considered and allowed.

Conclusion

Based on at least the foregoing amendments and remarks, Applicants submit that claims 2 and 4-11 are allowable, and this application is in condition for allowance. Accordingly, Applicants request favorable reexamination and reconsideration of the application. In the event the Examiner has any comments or suggestions for placing the application in even better form, Applicants request that the Examiner contact the undersigned attorney at the number listed below.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SHO-0053 from which the undersigned is authorized to draw.

Dated: March 15, 2005

Respectfully submitted,

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